[Icon

Description automatically generated](mailto:siddhantd28@gmail.com?subject=Hello%20Siddhant!)**[Logo

Description automatically generated](https://www.linkedin.com/in/scd/)**[Shape

Description automatically generated with low confidence](https://github.com/siddhantd28)**SIDDHANT DESHMUKH**

San Jose, California | [siddhantd28@gmail.com](mailto:siddhantd28@gmail.com) | 415-630-0891 *Engineering innovative platforms that scale seamlessly to support massive data volumes and mission-critical workloads*

**Experience**

**AMAZON WEB SERVICES (AWS) - Senior Software Engineer (L6) - OpenSearch - Palo Alto, California Sept 2022-Present**

* Led global innovation of **AWS OpenSearch**, a **Tier 1** mission-critical service **generating $B+** in revenue
* Built Query Insights, AWS OpenSearch’s core analytics platform helping customers optimize search performance
* Engineered Intelligent Insights, an LLM-powered platform that reduced incident MTTR by 90% fleetwide
* Led in-place cluster upgrade, cutting upgrade time by 500% and reducing B/G deployments for 1000s of customers
* Built scalable AWS Glue + Spark pipelines processing TBs of telemetry for anomaly detection and trend analysis
* Shipped Hard Cancellation to eliminate zombie queries via pattern matching, cutting CPU/memory waste by 25%
* Developed Cluster Insights, an analytics and recommendation service for cluster tuning
* Delivered operations support and tooling for large enterprises, protecting $B+ in critical workloads

**VMWARE - Senior Member of Technical Staff - Platform Team - Palo Alto, California Aug 2019-Sept 2022**

* Owned 30+ services in the [Uhana](https://www.virtualizationworks.com.au/datasheets/telcocloud/vmw-uhana-datasheet.pdf) platform, handling **10M+ EPS** ingest and **25M+ EPS** distribution globally
* Invented and [patented TCP Distributor](https://patents.google.com/patent/US11665094B2/en?q=(siddhant)&inventor=deshmukh&assignee=vmware&oq=siddhant+deshmukh+vmware) and built the [CRIC platform](https://techdocs.broadcom.com/us/en/vmware-sde/telco-cloud/vmware-telco-cloud-platform-ran/3-0/telco-cloud-platform-ran-intrinsic-security-guide/open-ran-architecture-and-vmware-telco-cloud-platform-ran.html) for large-scale customer trials
* Migrated Uhana from Mesas/Marathon to Kubernetes/Helm to streamline deployments
* Built ELK logging across regions and enabled zero-downtime upgrades with high availability

**UHANA (Acquired by VMWARE) - Senior Software Engineer - Palo Alto, California Aug 2019**

**INFORMATICA - Software Engineer - Cloud Platform Team - Redwood City, California Feb 2017-Jul 2019**

* Enhanced the [Informatica Cloud Platform](https://www.informatica.com/products/cloud-integration.html#fbid=SIPQ4DvQI3j), improving core services used by all cloud customers
* Owner of V3API (next-gen [public APIs](https://docs.informatica.com/integration-cloud/cloud-platform/current-version/rest-api-reference/informatica-intelligent-cloud-services-rest-api.html)), enabling seamless customer migration to cloud

**INFORMATICA - Software Development Intern - Cloud Platform Team - Redwood City, California May-Aug 2016**

**Skills**

**Languages:** Java, Python, Go, JavaScript, C++, Scala, R, Ruby, Rust

**Frameworks/Tools:** Node.js, Angular, Express, Bazel, Jenkins, Docker, Kubernetes, Helm

**Databases:** PostgreSQL, Cassandra, Redis, MongoDB, Elasticsearch, OpenSearch, DynamoDB

**Big Data & Streaming:** Spark, Flink, Kafka, Hadoop, Hive, Storm

**Cloud & DevOps:** AWS (Glue, S3, EC2, Lambda, Kinesis, SageMaker, CloudWatch), Prometheus, HAProxy

**AI/LLM:** AWS Bedrock, SageMaker, Claude, OpenAI GPT

**Projects**

**QUERY INSIGHTS -** Flagship analytics powering observability for search queries in AWS OpenSearch **Sept 2022-Present**

* Architected backend and frontend for Top Queries, Query Grouping, Query Metrics
* Integrated OpenTelemetry to enable end-to-end visibility into query performance at a global scale

**INTELLIGENT RCA SYSTEM WITH LLM INFRA -** AI driven OpenSearch domain analysis platform **Sept 2022-Present**

* Built AI-powered domain analysis system using CloudWatch, S3 and OpenSearch for automated issue detection
* Used Bedrock (Claude) for natural language summaries and enabled AI Ops integration with chatbot

**INPLACE UPDATES -** Critical project to cut cluster upgrade time for AWS OpenSearch customers **Sept 2022-Present**

* Eliminated need for B/G upgrades during config changes, speeding updates across global OpenSearch clusters

**UHANA PLATFORM** - AI-based analytics platform to improve customer experience on 4g & 5g networks **Aug 2019-Sept 2022**

* Ingest data at 10 million eps and distribute at 25 million eps (Java, Python, Kafka, Cassandra)

**TCP DISTRIBUTOR -** Critical services to distribute large scale network telemetry data to multiple clients **Aug 2019-Sept 2022**

* Filtered, processed, and distributed data from cell towers to multiple clients in real-time at 25 million eps

**ELK LOGGING FRAMEWORK –** Set up logging framework for Uhana Platform on multiple continents **Aug 2019-Sept 2022**

* Used Elasticsearch, Filebeat, Logstash, and Kibana to set up logging spanning multiple continents

**Conferences, Patents & Research**

**SPEAKER -** Presented OpenTelemetry and observability strategies at OpenSearchCon Berlin **May 2024**

**PATENT -** Designed the [patented TCP Distributor](https://patents.google.com/patent/US11665094B2/en?q=(siddhant)&inventor=deshmukh&assignee=vmware&oq=siddhant+deshmukh+vmware) for Uhana, VMware **Nov 2020**

**RESEARCH PAPER -** Efficient and Secure Template Blinding for Biometrics [IEEE CNS Research Paper](https://ieeexplore.ieee.org/abstract/document/7860539) **Oct 2016**

**Education**

**Master of Science in Computer Science Aug 2015-Dec 2016** University of Florida, USA  **4.0/4.0 GPA**